

MSB710-RT1

Preferred Device

PNP General Purpose Amplifier Transistor Surface Mount

Features

- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish

MAXIMUM RATINGS (T_A = 25°C)

Rating	Symbol	Value	Unit
Collector-Base Voltage	V _{(BR)CBO}	-60	Vdc
Collector-Emitter Voltage	V _{(BR)CEO}	-50	Vdc
Emitter-Base Voltage	V _{(BR)EBO}	-7.0	Vdc
Collector Current - Continuous	I _C	-500	mAdc
Collector Current - Peak	I _{C(P)}	-1.0	Adc

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Power Dissipation	P _D	200	mW
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-55 ~ +150	°C

ELECTRICAL CHARACTERISTICS (T_A = 25°C)

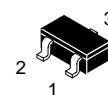
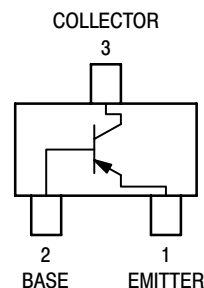
Characteristic	Symbol	Min	Max	Unit
Collector-Emitter Breakdown Voltage (I _C = -10 mAdc, I _B = 0)	V _{(BR)CEO}	-50	-	Vdc
Collector-Base Breakdown Voltage (I _C = -10 μAdc, I _E = 0)	V _{(BR)CBO}	-60	-	Vdc
Emitter-Base Breakdown Voltage (I _E = -10 μAdc, I _C = 0)	V _{(BR)EBO}	-7.0	-	Vdc
Collector-Base Cutoff Current (V _{CB} = -20 Vdc, I _E = 0)	I _{CBO}	-	-0.1	μAdc
DC Current Gain (Note 1) (V _{CE} = -10 Vdc, I _C = -150 mAdc) (V _{CE} = -10 Vdc, I _C = 500 mAdc)	h _{FE1} h _{FE2}	120 40	240 -	-
Collector-Emitter Saturation Voltage (I _C = -300 mAdc, I _B = -30 mAdc)	V _{CE(sat)}	-	-0.6	Vdc
Collector-Base Saturation Voltage (I _C = -300 mAdc, I _B = -30 mAdc)	V _{BE(sat)}	-	-1.5	Vdc
Output Capacitance (V _{CB} = -10 Vdc, I _E = 0, f = 1.0 MHz)	C _{ob}	-	15	pF

1. Pulse Test: Pulse Width ≤ 300 μs, D.C. ≤ 2%.



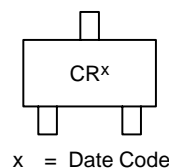
ON Semiconductor®

<http://onsemi.com>



SC-59
CASE 318D

MARKING DIAGRAM



ORDERING INFORMATION

Device	Package	Shipping†
MSB710-RT1	SC-59	3000 / Tape & Reel
MSB710-RT1G	SC-59	3000 / Tape & Reel

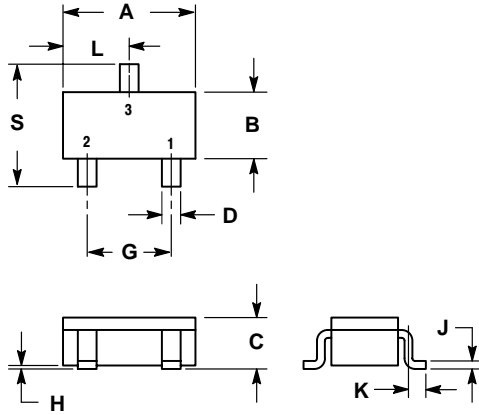
†For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specifications Brochure, BRD8011/D.

Preferred devices are recommended choices for future use and best overall value.

MSB710-RT1

PACKAGE DIMENSIONS

SC-59
CASE 318D-04
ISSUE F



NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETER.

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	2.70	3.10	0.1063	0.1220
B	1.30	1.70	0.0512	0.0669
C	1.00	1.30	0.0394	0.0511
D	0.35	0.50	0.0138	0.0196
G	1.70	2.10	0.0670	0.0826
H	0.013	0.100	0.0005	0.0040
J	0.09	0.18	0.0034	0.0070
K	0.20	0.60	0.0079	0.0236
L	1.25	1.65	0.0493	0.0649
S	2.50	3.00	0.0985	0.1181

SOLDERING FOOTPRINT*

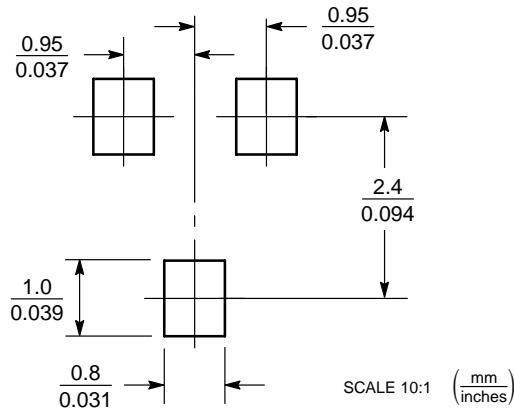



Figure 1. SC-59

*For additional information on our Pb-Free strategy and soldering details, please download the ON Semiconductor Soldering and Mounting Techniques Reference Manual, SOLDERRM/D.

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